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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| EXAMINER |
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MARTINEZ, DAVID E

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| ART UNIT | PAPER NUMBER |
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2182

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/870,880

Applicant(s)

TRISNO ET AL.

Examiner

David E. Martinez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 is/are allowed.
- 6) ☒ Claim(s) 12-18, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/1/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RD

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to claim 21, "wherein the plurality of nodes does not include a server" makes the claim indefinite and unclear. All of the operations being performed in claim 12 are server operations. If the plurality of nodes don't include a server function within each node, then the network of nodes wouldn't be able to perform the operations of claim 12. The operations of claim 12 (server operations) which are being performed by each node in the network contradict the statement "wherein the plurality of nodes does not include a server". A network without a server would be considered a "peer-to-peer network"; but even that kind of network is considered to have every node be a server. As defined by the Microsoft Computer Dictionary, a "peer-to-peer" network or architecture is:

A network of two or more computers that use the same program or type of program to communicate and share data. Each computer, or *peer*, is considered equal in terms of responsibilities and ***each acts as a server to the others in the network***. Unlike a client/server architecture, a dedicated file server is not required. However, network performance is generally not as good as under client/server, especially under heavy loads."

So although the claim calls for not including a server, this contradiction does not make sense and it is unclear to the examiner what the applicant is trying to limit.

Due to the vagueness and a lack of clear definiteness used in the claim, it has not been treated on its merits. See *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over RFC 2131 – DHCP (hereinafter DHCP). In view of US Patent No. 6,697,649 to Bennett et al. (Bennett).

1. With regards to claim 12, DHCP teaches in a network comprising a plurality of nodes, a method for assigning a different network address to each node [abstract on cover page] of the plurality of nodes, the method comprising each node performing the steps of:

periodically broadcasting a unique identifier for the node to the other nodes [page 11, section 2.2, "The second service... ..been retired.", page 26, section 4.3.1., and page 27, 1st bullet. When a node requests for an extension on it's current address lease, that node must periodically broadcast a request (the request has the unique identifier within) for that address before that lease expires] of the plurality of nodes, wherein each node has a different unique identifier [all nodes come with unique hardware identifiers (MACs) that are preprogrammed into all the the network interfaces that correspond to each node. Pages 10-11, section 2.1, page 25, under section 4.2, "A DHCP server... ..hardware box".];

receiving unique identifiers for the other nodes [page 8, field "chaddr", and paragraph below Fig 1, page 9, defined as client hardware address. Each DHCP message between any client/server used the format of fig 1, the chaddr field is that of the requesting device. Also Section 2.2 on page 11 discloses clients requesting a network address, thus with the use of the

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DHCP message format of Fig 1, when the request is done, the client(s) send their unique identifiers "h/w address or MACs" to the server]; and

in an address table comprising a plurality of records, each record corresponding to one of the nodes in the plurality of nodes and including a unique identifier for the node and a network address for the node [pages 10-11, section 2.1, DHCP provides a repository where it stores parameters for each client holding both it's unique identifier (hardware address/MAC) and their assigned network address (IP subnet number)];

if a record containing the unique identifier does not exist, creating a new record and inserting the received unique identifier into the record [Pages 10-11, section 2.1]; and

if a record containing the unique identifier does exist, updating the record [Page 11, section 2.2 when updating the lease, the server must update the record]; and

reassigning the network addresses in the records based on the unique identifiers in the records [Page 11, section 2.2 the node who is extending it's lease must be reallocated a network address from the server. The requesting node provides the server with it's unique identifier each time they communicate], wherein each node of the plurality of nodes determines which network address to assign to each record in a common predetermined manner [page 6, page 11, section 2.2].

DHCP teaches all of the above limitations except for having all of the nodes in a network doing the above operations. However, Bennet teaches a network wherein all the nodes periodically broadcast their ids to all the other nodes in a network, and all the nodes keeping records of the other nodes available in the vicinity for the benefit of having all the nodes keep track of all the other nodes in the network and their available resources [column 7 lines 24-47].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of DHCP and Bennet to have all the nodes (instead of only one node)

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in the network perform all of the above operations for the benefit of having all the nodes keep track of all of the other nodes in the network and of their respective available resources.

2. With regards to claim 13, The method of claim 12, wherein reassigning the network addresses in the records comprises:

determining which records are unexpired [page 11, section 2.2]; and

reassigning the network addresses only for unexpired records [page 11, section 2.2].

3. With regards to claim 14, DHCP teaches the method of claim 12 wherein reassigning the network addresses in the records comprises:

reassigning the network addresses only when a new record is created [page 11, section 2.2].

4. With regards to claim 15, DHCP teaches the method of claim 12 wherein:

the record for a node further includes a time to live field indicating a time remaining until expiration of the record [page 44 host configuration parameters, "Default TTL" (TTL = Time to Live), and "TTL". Page 37, Table 5, "IP address lease time"]; and

wherein updating the record comprises resetting the time to live field for the record [page 11, section 2.2].

5. With regards to claim 16, DHCP teaches the method of claim 15 wherein;

the step of periodically broadcasting a unique identifier to the other nodes of the plurality of nodes comprises all nodes broadcasting their unique identifiers once per a time interval [page 12, section 3.1.1, page 15, section 3.1.3]; and

the step of resetting the time to live field comprises resetting the time to live field to a value at least two times as long as the time interval [pg 19, section 3.3].

6. With regards to claim 17, DHCP teaches the method of claim 15 wherein reassigning the network addresses in the records comprises:

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marking a record as expired when the time to live field for that record expires [pg 19, section 3.3 "the server may consider the lease expired before the client does"]; and

reassigning the network addresses only for unexpired records [page 11, section 2.2].

7. With regards to claim 18, DHCP teaches the method of claim 12 further comprising proxying the unique addresses for records which have expired but have not been purged [page 5, "Bootp relay agent" bullet, pg 6 – "DHCP should not require... ..relay agents" bullet, and page 12 section 3.1.1].

8. With regards to claim 20, Bennett teaches the method of claim 12, wherein each node in the plurality of nodes independently determines a network address for at least each other node in the plurality of nodes using the periodically broadcast unique identifiers from each of the other nodes in the plurality of nodes and using the common predetermined manner [column 3 lines 47-52, column 7 lines 24-47] for the same reasons as those set forth above under claim 12.

Allowable Subject Matter

Claim 19 is allowed over the prior art.

Response to Arguments

Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Martinez whose telephone number is (571) 273-4152. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEM



KIM HUYNH
PRIMARY EXAMINER
8/2/05